WHAT IS CLAIMED IS:

1. A method of reducing the number of osteoblasts undergoing apoptosis in an individual in need of such treatment, comprising the step of:

administering a therapeutic dose of human parathyroid hormone [hPTH(1-34)] to said individual, wherein administration of human parathyroid hormone [hPTH(1-34)] results in a reduction in the number of osteoblasts undergoing apoptosis, thereby preventing bone loss and/or stimulating bone formation in said individual.

2. The method of claim 1, wherein said individual is osteopenic.

3. The method of claim 1, wherein said individual is selected from the group consisting of an individual currently being treated with one or more glucocorticoid compounds and an individual previously treated with one or more glucocorticoid compounds.

4. The method of claim 1, wherein said administration is selected from the group consisting of systemic, oral, intravenous, nasal spray and inhallation.

5. The method of claim 1, wherein said human parathyroid hormone [hPTH(1-34)] is administered in a dose of from about 10 µg/kg to about 1000 µg/kg.

6. A method of screening for a compound that stimulates bone formation, comprising the steps of:

(a) contacting osteoblast cells with a test compound;

(b) determining the number of said cells undergoing apoptosis; and

(c) comparing the number of apoptotic cells with osteoblast cells that have not been contacted with said compound, wherein fewer apoptotic cells following contact with said compound than in the absence of said contact indicates that said compound inhibits apoptosis resulting in stimulation of bone formation.

7. The method of claim 6, wherein said contacting of said osteoblast cells is selected from the group consisting of *in vitro* osteoblast cells and an *in vivo* murine animal model.

8. The method of claim 7, wherein said *in vivo* murine animal model is selected from the group consisting of a SAMP6 mouse, a SAMR1 mouse and other strains of mice.

9. The method of claim 6, wherein said stimulation of bone formation is confirmed by methods selected from the group consisting of measuring BMD, measuring cancellous bone area, measuring cancellous bone formation rate, measuring the number of osteoblasts per cancellous bone perimeter and measuring the number of osteocytes per bone area in said murine animal model following said contact with said compound compared with a murine animal model in the absence of said contact with said compound.

10. The method of claim 6, wherein said determination of apoptotic cells is selected from the group consisting of microscopy of stained cells, TUNEL, Hoescht 33258 dye and video image analysis.

11. A method of screening for a compound that reduces bone loss, comprising the steps of:

(a) treating osteoblast cells with a glucocorticoid;

(b) contacting said osteoblast cells with a test compound;

(c) determining the number of said osteoblast cells undergoing apoptosis; and

(d) comparing the number of apoptotic cells with osteoblast cells that have been treated with said glucocorticoid but were not contacted with said test compound, wherein fewer apoptotic cells following contact with said test compound than in the absence of said contact with said test compound indicates that said compound inhibits apoptosis of osteoblast cells thereby reducing bone loss.

12. The method of claim 11, wherein said contacting of said osteoblast cells is selected from the group consisting of *in vitro* osteoblast cells and an *in vivo* murine animal model.

13. The method of claim 12, wherein said *in vivo* murine animal model is selected from the group consisting of a SAMP6 mouse and a SAMR1 mouse.

14. The method of claim 11, wherein said determination of apoptotic cells is selected from the group consisting of microscopy of stained cells, TUNEL, Hoescht 33258 dye and video image analysis.